

## CLAIMS

1. An antenna for a radio device, comprising:
  - a radiating body having a first end and a second end, the second end being operable as an open end;
  - a feed point between the first end and the second end; and
  - a detuning switch for grounding the radiating body at a particular point between the feed point and the second end such that the power draw caused by the antenna to other antennas is reduced.
2. An antenna according to claim 1, wherein the detuning switch has been configured to ground the radiating body from substantially the second end.
3. An antenna according to claim 1, wherein the first end comprises a grounding point.
4. An antenna according to claim 1, wherein the antenna has been configured to operate substantially as a quarter wave length antenna when in use.
5. An antenna according to claim 1, wherein the first end is open-ended when operating.
6. An antenna according to claim 1, wherein the antenna has been configured to operate substantially as a half wave length antenna when in use.
7. An antenna according to claim 1, wherein the antenna is a multi-band antenna.
8. An antenna according to claim 1, wherein the antenna is a Planar Inverted F-Antenna.
9. An antenna according to claim 1, wherein the tuning switch comprises a low

insertion loss switch.

10. An antenna arrangement comprising a first antenna and a second antenna, whereby the first antenna is operable on a first frequency band and the second antenna is operable on a second frequency band such that the second antenna can draw transmission power from the first antenna, the second antenna comprising:

a radiating body having a first end and a second end, the second end being operable as an open end; and

a feed point between the first end and the second end; the antenna arrangement further comprising:

a detuning switch for grounding the radiating body at a particular point between the feed point and the second end.

11. An antenna arrangement according to claim 10, wherein the detuning switch has been configured to ground the radiating body from substantially the second end.

12. An antenna arrangement according to claim 10, wherein the first end comprises a grounding point.

13. An antenna arrangement according to claim 10, wherein the antenna has been configured to operate substantially as a quarter wave length antenna when in use.

14. An antenna arrangement according to claim 10, wherein the first end is open-ended when operating.

15. An antenna according to claim 10, wherein the antenna has been configured to operate substantially as a half wave length antenna when in use

16. A radio device comprising a first antenna and a second antenna, whereby the first antenna is operable on a first frequency band and the second antenna is operable on a second frequency band such that the second antenna can draw transmission power from the first antenna, the second antenna comprising:

a radiating body having a first end and a second end, the second end being operable as an open end; and

a feed point between the first end and the second end; the radio device further comprising:

a detuning switch for grounding the radiating body at a particular point between the feed point and the second end.

17. A radio device according to claim 16, wherein the radio device is a portable radio device.

18. A method of improving antenna isolation in a system comprising a first antenna and a second antenna, wherein the second antenna can be idle whilst the first antenna operates, wherein the second antenna comprises a radiating body having a first end and second end and a feed point between the first end and the second end, the method comprising the steps of:

detuning the second antenna when idle by grounding the radiating body between the feed point and the second end; and

terminating the grounding for the second antenna to be used.

19. A method according to claim 18, wherein the steps of grounding and terminating the grounding take place automatically depending on whether the isolation need to be improved and / or the antenna is needed for transmission and / or reception of radio signals.

20. A controller for a system comprising a first antenna and a second antenna

where the second antenna can be idle and draw power from the first antenna whilst the first antenna operates, wherein the second antenna comprises a radiating body having a first end and second end and a feed point between the first end and the second end, whereby the radiating body has been configured to be alternatively grounded and not grounded at a particular point between the feed point and the second end of the radiating body, the controller comprising means for causing the grounding when the second antenna is idle to detune the second antenna and not to detune the second antenna when the second antenna is in use.

5

10